

Title (en)

METAL OXIDE PARTICLES CONTAINING TITANIUM OXIDE COATED WITH SILICON DIOXIDE-TIN(IV) OXIDE COMPLEX OXIDE

Title (de)

METALLOXIDTEILCHEN MIT EINEM SILICIUMDIOXID-TIN (IV)-OXID-KOMPLEX BESCHICHTETEM TITANOXID

Title (fr)

PARTICULES D'OXYDE MÉTALLIQUE CONTENANT UN OXYDE DE TITANE ENROBÉ PAR UN OXYDE COMPLEXE DIOXYDE DE SILICIUM-OXYDE D'ÉTAIN(IV)

Publication

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Application

EP 12793772 A 20120601

Priority

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- JP 2012064296 W 20120601

Abstract (en)

There is provided as metal oxide particles having a high refractive index, and having a microscopic particle diameter in order to ensure high transparency, and almost suppressing excitation caused by ultraviolet rays, a metal oxide particle containing titanium oxide coated with silicon dioxide-stannic oxide complex oxide comprising: a titanium oxide-containing core particle (A); and a coating layer with which the titanium oxide-containing core particle (A) is coated and that is made of silicon dioxide-stannic oxide complex oxide colloidal particles (B) having a mass ratio of silicon dioxide/stannic oxide of 0.1 to 5.0, wherein one or more intermediate thin film layers that are made of any one of an oxide; a complex oxide of at least one element selected from the group consisting of Si, Al, Sn, Zr, Zn, Sb, Nb, Ta, and W; and a mixture of the oxide and the complex oxide are interposed between the titanium oxide-containing core particle (A) and the coating layer made of the silicon dioxide-stannic oxide complex oxide colloidal particles (B).

IPC 8 full level

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CPC (source: EP KR US)

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Cited by

EP3438052A4; CN108698851A; EP3438053A4; EP3626885A1; AU2019341503B2; EP3885381A4; US10676643B2; US10669426B2; US11623993B2; WO2020058166A1; WO2023141066A1; WO2023141065A1

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